

Drain, Clean and Dry

(source: Colorado DOW handout, Drain, Clean, and Dry)

Watercraft Cleaning to Prevent the Spread of Invasive Species

Preventing the spread of aquatic nuisance species starts with you – the vessel owner. A cooperative effort is necessary by all persons involved with recreational watercraft use to achieve the best results and protect our aquatic resources and recreational opportunities.

Boats and trailer can easily transport aquatic hitchhikers in many different ways. If you don't clean your vessel, you may introduce aquatic nuisance species. Also, species such as zebra and quagga mussels can ruin boat engines and jam steering equipment.

Remember: DRAIN, CLEAN and DRY

Follow these guidelines: While on land, but before leaving a body of water:

DRAIN:

- Drain every conceivable space or item that can hold water.
- Follow factory guidelines for eliminating water from engines. All engines hold water.
- Remove the drain plug from boats and put boat on an incline so that the water drains out.
- Drain live-wells, bilge, ballast tanks and transom wells.
- Empty water out of kayaks, canoes, rafts, etc.

CLEAN:

- Remove any visible plant fragments as well as mud or other debris. Plant material, mud and other debris routinely contain other organisms that may be an aquatic nuisance species. Some plant species are aquatic nuisance species.
- Check trailer, including axle and wheel areas – in and around the boat itself: anchor, props, ropes, boat bumpers and paddles.
- Clean, check and dry off all parts and equipment that came in contact with water.
- Empty bait buckets into trash. Do not empty any bait fish into the lake.
- Potassium Chloride: an effective mussel-killing remedy that works on both adult and veligers is a 200 parts per million solution of potassium chloride (KCL). You can make this solution by thoroughly mixing one teaspoon of dry KCL crystals in two gallons of water. You can add the KCL solution to your empty ballast tanks after draining them to treat the small amount of left-over water that typically does not drain all the way out.
- KCL mixed in the solution described above is deadly to zebra and quagga mussel adult and veligers. However, it is harmless to other aquatic organisms and humans. It also has extremely low corrosion characteristics and has been used in the oil well drilling industry for decades.

- Potassium chloride crystals are available at many home improvement stores and water softener suppliers. Using a car wash or home power sprayer is not adequate to kill and/or remove zebra or quagga mussels
- **IMPORTANT!** – Do not use any other kind of salt solution. Typical salt used for seasoning and food consumption is Sodium Chloride (NaCl). It will not kill zebra and quagga mussels.

DRY:

- Allow everything to completely dry before launching into another body of water.

BACKGROUND:

Zebra and Quagga mussels are a particularly hardy variety of aquatic nuisance species. The adults, ranging in size from a grain of sand to two inches in length, can attach to anything in the water including vessels, outboard engines, anchors, etc. Zebra and Quagga mussel larvae (veligers) are microscopic and inhabit the water along with other forms of plankton. They are easily transported in ballast tanks, bilge water, live wells, and anything else that has been in and retains water.